

MEMORANDUM

To: All Fellows, Affiliates, Associates, and Correspondents of the Canadian Institute of Actuaries, and other interested parties

From: Josephine Marks, Chair
Actuarial Standards Board
Marshall Posner, Chair
Designated Group

Date: September 14, 2021

Subject: **Final Standards – Revisions to Subsection 3540 of the Practice-Specific Standards for Pension Plans – Addressing Pension Commuted Values in Economic Environments where Bond Yields are Negative**

Document 221101

On September 8, 2021, the Actuarial Standards Board (ASB) approved changes to subsection 3540 of the *Standards of Practice*, which applies to the actuary's advice on the computation of commuted values with respect to pension plans. The ASB and its Designated Group have followed the ASB's due process in the development of these revisions to the *Standards of Practice*.

Background

On November 25, 2020, the ASB established the Designated Group on Pension Commuted Values when Bond Yields are Negative (DG). The CIA posted a [notice of intent](#) (NOI) to the CIA website on January 28, 2021. Readers should refer to the NOI for background on the issue. The NOI had a comment deadline of February 19, 2021.

The CIA next posted an [exposure draft](#) (ED) to the CIA website on May 29, 2021. The ED contained a summary of the comments submitted on the NOI and included proposed changes to subsection 3540 along with the DG's rationale for proposing them. The ED had a comment deadline of July 30, 2021. Appendix A of this document contains a summary of the comments submitted along with the DG's responses to those comments.

Summary of changes

The two changes to subsection 3540 are:

- adjust the formula for r_7 to $(1+r_L)*(1+i_7)/(1+i_L) - 1$; and
- apply a floor of zero to the two nominal interest rates i_{1-10} and i_{10+} .

[Document 221103](#) contains the revised subsection 3540 of the Practice-Specific Standards for Pension Plans – Pension Commuted Values and the revised subsection 3540 in red-line.

Timeline

The final Standards have an effective date of **February 1, 2022**. Early implementation is not permitted. For added clarity, an effective date of February 1, 2022, means these new standards apply to all calculations for which the valuation date falls on or after February 1, 2022, and the previous standards apply to calculations for which the valuation date falls before February 1, 2022.

Members of the DG

The members of the DG are Lydia Audet, Gavin Benjamin, Doug Chandler, Marshall Posner (Chair), and Jingjing Xu.

For this initiative, the DG would like to thank the ASB, the Committee on Pension Plan Financial Reporting, and Fiera Capital for their support and/or comments, and the CIA Head Office for their valuable assistance.

JEM, MP

Appendix A: Summary of the comments received on the exposure draft (ED) and the DG's responses

Five parties submitted comments on the ED: three are pension consulting firms, one is a group of public sector pension plan administrators, and one is an industry association. The DG appreciates very much the feedback received.

Commenters generally submitted their feedback as responses to the three questions posed in the ED.

1. *Do you agree with the proposed change to r_7 ? If not, what would you suggest?*

All five commenters agreed that this proposed change produces a more reasonable inflation assumption than the status quo, or any other of the options reviewed by the DG. Most cited the analysis provided with the ED as thorough and convincing.

2. *Do you agree with the proposed restriction (i.e., floor of zero) to i_{1-10} and i_{10+} ?*

Four of the five commenters agreed with this proposed change, citing that it is likely a reasonable and appropriate limit to place on these rates in an economic environment that Canada (and indeed the world) has yet to experience. Some commenters said that the proposal is consistent with a fair economic value of the stream of pension payments. One commenter believes that the liquidity premium in the current standard is too low and that this proposal edges the standards towards an appropriate liquidity premium.

One commenter disagreed with the floor of zero, since a former plan member who accepts a locked-in commuted value is unable to take the transfer in cash and the return on a demand deposit in the locked-in account would presumably be negative. This argument appears to be based on a replicating investment perspective, rather than the economic value perspective enunciated in paragraph 3520.00. The DG anticipates that if long-term corporate bonds were to trade at a value that exceeds the sum of all the required payments under the bond, it would be because investors place a value on the liquidity of these bonds in excess of the time value of money. As the ED memo stated, "If the floor of zero were to impact commuted values for a prolonged period for reasons other than those anticipated by the DG, it should be reevaluated based on those new circumstances." For example, this unprecedented situation might arise because market participants expect a prolonged period of deflation and the time value of money might be less than the value of increases in purchasing power of money. Under this circumstance, the ASB would need to reconsider paragraph 3540.04, which states that the commuted value of an indexed pension should be at least equal to the commuted value of a non-indexed pension in the same amount and having similar characteristics.

3. *Can plan administrators implement the change(s) in the time frame envisioned?*

All five commenters requested some time to implement the changes (either three, four, or six months) between final publication and the effective date. While noting that yields on long-term real return bonds are fluctuating near zero in the last several months, putting pressure to set an implementation date as early as practical, the DG concluded that a February 1, 2022 effective date is reasonable.

Unrelated to the above three questions, one commenter suggested that paragraph 3540.16 can lead to differing results depending on interpretation and the model used to develop a provision for indexing. The commenter would like to see the range of acceptable practice limited to encourage more uniformity across pension plans and practitioners.

The DG appreciates the comment, which was also raised at the NOI stage, however, given its mandate, the DG did not feel it is appropriate to modify or even recommend a review of this paragraph. The DG believes the commenter would be best served by raising the matter with the PPFRC.